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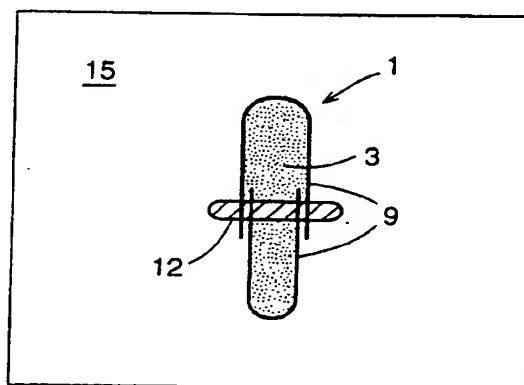
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(54) **PH-triggered osmotic bursting delivery devices.**

(57) An osmotic bursting device for dispensing a beneficial agent to an aqueous environment. The device comprises a beneficial agent and osmagent surrounded at least in part by a semipermeable membrane. Alternatively the beneficial agent may also function as the osmagent. The semipermeable membrane is permeable to water and substantially impermeable to the beneficial agent and osmagent. A trigger means is attached to the semipermeable membrane (e.g., joins two capsule halves). The trigger means is activated by a pH of from 3 to 9 and triggers the eventual, but sudden, delivery of the beneficial agent. These devices enable the pH-triggered release of the beneficial agent core as a bolus by osmotic bursting.]



**FIG. 1**

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# EUROPEAN SEARCH REPORT

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.5)
X	WO-A-92 17165 (CSL LIMITED) 15 October 1992 * page 7, line 39 - page 9, line 26 * * page 11 - page 13; example 12 * ---	1-3, 12-14	A61K9/52 A61K9/28 A61K9/48 A61K9/50
Y	EP-A-0 357 369 (PFIZER INC) 7 March 1990 * column 43; example 41 * * column 46; example 45 * ---	1-8,10	
Y	SUCKER H. ET AL 'Pharmazeutische Technologie' 1991, GEORG THIEME VERLAG, STUTTGART NEW YORK 018956 * page 356; table 8.20 * * page 358, column 1, paragraph 1 * * page 378, column 2, paragraph 1 * ---	1-8,10	
Y	EP-A-0 210 540 (FUJISAWA PHARMACEUTICAL CO LTD) 4 February 1987 * column 2, line 17 - line 32 * * column 18; example 10 * ---	1-3, 12-33	
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X	WO-A-91 14426 (ALZA CORPORATION) 3 October 1991 * page 2, line 26 - page 3, line 19 * * page 5, line 24 - line 31 * * page 18 - page 20; examples 1,2 * ---	1-3, 12-14	
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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 18 September 1995	Examiner Boulois, D
<p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>X : particularly relevant if taken alone  Y : particularly relevant if combined with another document of the same category  A : technological background  O : non-written disclosure  P : intermediate document</p> <p>T : theory or principle underlying the invention  E : earlier patent document, but published on, or after the filing date  D : document cited in the application  L : document cited for other reasons</p> <p>-----  &amp; : member of the same patent family, corresponding document</p>			

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EP 94 30 1026

DOCUMENTS CONSIDERED TO BE RELEVANT			
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			TECHNICAL FIELDS SEARCHED (Int.Cl.5)
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